30

CLAIMS

5

- 1. A stream of non-soliton RZ pulses, characterized in that the phase difference between the end of one pulse and the beginning of the next pulse is in the range from $2\pi/3$ to $4\pi/3$.
- 2. The pulse stream of claim 1, characterized in that each pulse has a constant phase.
- 3. The pulse stream of claim 1, characterized in that the phase varies between the beginning of a pulse and the end of the pulse.
- 10 **4.** The pulse stream of claim 3, characterized in that the phase variation in a pulse is sinusoidal.
 - 5. The pulse stream of claim 4, characterized in that the phase variation in a pulse is a squarewave.
 - 6. The pulse stream of claims 1 to 5, characterized in that it is modulated.
- 7. A stream of non-soliton RZ pulses, characterized in that the phase difference between the end of a pulse and the beginning of the immediately following pulse is in the range from $2\pi/3$ to $4\pi/3$.
 - **8.** The pulse stream of claim 7, characterized in that each pulse has a constant phase.
- 20 **9.** The pulse stream of claim 8, characterized in that the difference between the phase of an even-numbered pulse and the phase of an odd-numbered pulse is in the range from $2\pi/3$ to $4\pi/3$.
 - 10. A method of transmitting a stream of pulses according to claim 2, including sending the pulses and reversing the phase of each new pulse.
- 25 **11.** A method according to claim 3, 4 or 5 of transmitting a stream of pulses, including sending the pulses and phase modulating each pulse.
 - 12. A method according to claim 7, 8 or 9 of transmitting a stream of pulses, including sending a stream of pulses at half the pulse frequency with a first phase, sending a stream of pulses at half the pulse frequency with a second phase, and interleaving the two streams of pulses at half the pulse frequency.